Most U.S. thin-wall (1/2") nuclear waste canisters in use less than 10 years*

*Koebberg tank leaked in 17 years

Cumulative canister total

Year canister loaded (number loaded, current age)

*Majority of thin-wall welded stainless steel spent nuclear fuel canisters in use less than 10 years. Canisters cannot be inspected, even on the outside, once filled with highly radioactive nuclear fuel waste and are susceptible to cracking. Once cracks start they can grow through canister walls undetected. The Koebberg nuclear plant had a similar container (a waste water tank) leak in only 17 years with cracks up to 0.61" deep. The majority of U.S. thin-walled canisters have only 1/2" (0.50") stainless steel walls. Koebberg cracks were caused by the ocean environment, but many other factors can cause canisters to crack, such as air pollution (sulfites). San Onofre 5/8" (0.625") thin-wall canisters are included in this chart. 2013 includes only 6 months of 2013. Chart excludes 249 U.S. thick-walled (10" to 14") bolted-lid casks. Unlike thin-walled canisters, bolted-lid thick casks provide monitored retrievable storage and transport. They can be inspected inside and out, monitored, maintained, repaired, and have systems in place to avoid radiation leaks. Thin-wall canisters don't meet these requirements. Sources: DOE EIA 6/30/2013 ISFSI inventory, NRC.gov ML12319A440, ML14258A082, ML14258A081. Additional government/scientific sources at SanOnofreSafety.org